What is claimed is:

1   1. A connecting structure of a coaxial cable and a coaxial connector for electrically and

2   mechanically connecting said coaxial cable and said coaxial connector, said connecting structure

3   comprising:

4   a braided conductor exposed on an end of said coaxial cable;

5   a metal tape conductor inside said braided conductor on said coaxial cable;

6   connecting conductor portions formed continuously on an end of a shell of said coaxial

7   connector, said connecting conductor portions being inserted into a space between said braided

8   conductor and said metal tape conductor; and

9   a caulked, cylindrical sleeve having a crimp height H1, said sleeve formed by jointing two

10   opposing almost semi-circular members, an outside contour of each said almost semi-circular

11   member having a radius R1 so that said radius R1 and said crimp height H1 satisfy the following

12   Equations (1) and (2), respectively:

13   (1) $R1 = P1 \times (D + 2 \times T1)$ and

14   (2) $H1 = P2 \times R1$

15   where D is an outside diameter of said coaxial cable, T1 is a plate thickness of said sleeve, P1 is a

16   numerical value set within the range from 0.45 to 0.48, and P2 is a numerical value set within the

17   range from 2.02 to 2.12.

1   2. The connecting structure of a coaxial cable and a coaxial connector according to Claim 1,

2   further comprising:

3   protruding strips formed on an outer circumference of said caulked sleeve and

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4   a joint portion between said almost semi-circular member and said protruding strips;

5   wherein

6   an outside contour of a cross section of said joint portion connects an outside contour of a

7   cross section of said protruding strips to an outside contour of a cross section of said almost semi-

8   circular member;

9   said outside contour of said cross section of said joint portion has a curvature radius R2

10   and said outside contour of the cross section of said protruding strips has a height H2 in a direction

11   of said crimp height H1, said curvature radius R2 and said height H2 satisfy the following

12   Equations (3) and (4), respectively:

13   (3) $R2 = P3 \times T1$ and

14   (4) $H2 = P4 \times R1$

15   where P3 is a numerical value set within the range from 1.8 to 2.2 and P4 is a numerical value set

16   within the range from 1.5 to 2.0.

1   3. A connecting structure of a coaxial cable and a coaxial connector for electrically and

2   mechanically connecting said coaxial cable and said coaxial connector, said connecting structure

3   comprising:

4   a braided conductor exposed on an end of said coaxial cable;

5   a dielectric material inside said braided conductor on said coaxial cable;

6   connecting conductor portions formed continuously on an end of a shell of said coaxial

7   connector, said connecting conductor portions being inserted into a space between said braided

8   conductor and said dielectric material; and

9   a caulked, cylindrical sleeve having a crimp height H1, said sleeve formed by jointing two

10 opposing almost semi-circular members, an outside contour of each said almost semi-circular

11 member having a radius R1 so that said radius R1 and said crimp height H1 satisfy the following

12 Equations (1) and (2), respectively:

13   (1) $R1 = P1 \times (D + 2 \times T1)$ and

14   (2) $H1 = P2 \times R1$

15 where D is an outside diameter of said coaxial cable, T1 is a plate thickness of said sleeve, P1 is a

16 numerical value set within the range from 0.45 to 0.48, and P2 is a numerical value set within the

17 range from 2.02 to 2.12.

1 4. The connecting structure of a coaxial cable and a coaxial connector according to Claim 3,

2 further comprising:

3   protruding strips formed on an outer circumference of said caulked sleeve and

4   a joint portion between said almost semi-circular member and said protruding strips;

5 wherein

6   an outside contour of a cross section of said joint portion connects an outside contour of a

7 cross section of said protruding strips to an outside contour of a cross section of said almost semi-

8 circular member;

9   said outside contour of said cross section of said joint portion has a curvature radius R2

10 and said outside contour of the cross section of said protruding strips has a height H2 in a direction

11 of said crimp height H1, said curvature radius R2 and said height H2 satisfy the following

12 Equations (3) and (4), respectively:

13   (3) $R2 = P3 \times T1$ and

14   (4) $H2 = P4 \times R1$

15 where P3 is a numerical value set within the range from 1.8 to 2.2 and P4 is a numerical value set

16 within the range from 1.5 to 2.0.

1 5. A method for forming a connecting structure of a coaxial cable and a coaxial connector for

2 electrically and mechanically connecting a coaxial cable and a coaxial connector, said method

3 comprising:

4   allowing a braided conductor to be exposed from an end of said coaxial cable;

5   inserting connecting conductor portions formed continuously from an end of a shell of

6 said coaxial connector into a space between said braided conductor and a metal tape conductor

7 inside said braided conductor;

8   caulking a cylindrical sleeve having a crimp height H1, said step of caulking said sleeve

9 comprising jointing two opposing almost semi-circular members, each almost semi-circular

10 member having a radius R1, said radius R1 and said crimp height H1 satisfying the following

11 Equations (1) and (2), respectively:

12   (1) $R1 = P1 \ (D + 2 \ T1)$

13   (2) $H1 = P2 \ R1$

14 where D is an outside diameter of said coaxial cable, T1 is a plate thickness of said sleeve, P1 is a

15 numerical value set within the range from 0.45 to 0.48, and P2 is a numerical value set within the

16 range from 2.02 to 2.12;

17   said caulked sleeve further comprises protruding strips formed on an outer circumference

18 of said caulked sleeve and a joint portion between said almost semi-circular member and said

19 protruding strips;

20   an outside contour of a cross section of said joint portion connects an outside contour of a

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21   cross section of said protruding strips to an outside contour of a cross section of said almost semi-

22   circular member; and

23   said outside contour of said cross section of said joint portion has a curvature radius R2

24   and said outside contour of the cross section of said protruding strips has a height H2 in a direction

25   of said crimp height H1, said curvature radius R2 and said height H2 satisfy the following

26   Equations (3) and (4), respectively:

27   (3) $R2 = P3 \times T1$ and

28   (4) $H2 = P4 \times R1$

29   where P3 is a numerical value set within the range from 1.8 to 2.2 and P4 is a numerical value set

30   within the range from 1.5 to 2.0.

1   6. A method for forming a connecting structure of a coaxial cable and a coaxial connector for

2   electrically and mechanically connecting a coaxial cable and a coaxial connector, said method

3   comprising:

4   allowing a braided conductor to be exposed from an end of said coaxial cable;

5   inserting connecting conductor portions formed continuously from an end of a shell of

6   said coaxial connector into a space between said braided conductor and a dielectric material inside

7   said braided conductor;

8   caulking a cylindrical sleeve having a crimp height H1, said step of caulking said sleeve

9   comprising jointing two opposing almost semi-circular members, each almost semi-circular

10   member having a radius R1, said radius R1 and said crimp height H1 satisfying the following

11   Equations (1) and (2), respectively:

12   (1) $R1 = P1 \ (D + 2 \ T1)$

13   (2) $H1 = P2 \quad R1$

14   where D is an outside diameter of said coaxial cable, T1 is a plate thickness of said sleeve, P1 is a

15   numerical value set within the range from 0.45 to 0.48, and P2 is a numerical value set within the

16   range from 2.02 to 2.12;

17   said caulked sleeve further comprises protruding strips formed on an outer circumference

18   of said caulked sleeve and a joint portion between said almost semi-circular member and said

19   protruding strips;

20   an outside contour of a cross section of said joint portion connects an outside contour of a

21   cross section of said protruding strips to an outside contour of a cross section of said almost semi-

22   circular member; and

23   said outside contour of said cross section of said joint portion has a curvature radius R2

24   and said outside contour of the cross section of said protruding strips has a height H2 in a direction

25   of said crimp height H1, said curvature radius R2 and said height H2 satisfy the following

26   Equations (3) and (4), respectively:

27   (3) $R2 = P3 \times T1$ and

28   (4) $H2 = P4 \times R1$

29   where P3 is a numerical value set within the range from 1.8 to 2.2 and P4 is a numerical value set

30   within the range from 1.5 to 2.0.

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